

Remarks

Claims 1 through 14 remain pending in the application.

The Office Action rejected claims 1 through 7 as anticipated by Mann et al., Method of Treatment of Dysmenorrhea or Relieving Menstrual Cramps, U.S. Patent 6,282,443 (Aug. 28, 2001). The rejection is based on 35 U.S.C. § 102(e), which requires that the cited reference be "granted on an application for patent by another." The 102(e) rejection can be traversed with evidence that Mann and the current application were not filed by another. Mann is not prior art with respect to the current application because Mann was not granted on an application for patent by another. Both Thomas L. Grey and Gregory J. Gruzdowich were inventors on all of the claims in both the cited reference and this application, as evidenced by the attached declarations under 37 C.F.R. § 1.132 by both Thomas L. Grey and Gregory J. Gruzdowich. In addition, Thomas L. Grey and Gregory J. Gruzdowich were inventors of all claimable subject matter in the Mann patent. Since Mann was not filed "by another," Mann does not qualify as a reference against this application. Thus, Mann is not prior art with respect to claims 1 through 7.

The Office Action rejected claims 8 through 14 as obvious over Mann under the assertion that Mann does not explicitly discuss treating vertigo, that Mann does disclose treating dizziness by the claimed methods, that vertigo by definition relates to a feeling of dizziness, and that it would have been obvious that the method of treating dizziness would also treat vertigo. Again, Mann does not qualify as a reference under 35 U.S.C. § 102(e); therefore, the rejection is not applicable to claims 8 through 14. In addition, both Mann and this application were invented by common inventors who were all required to assign all inventions to a common entity, Woodside Biomedical, Inc., at the time of invention. Thus, under 35 U.S.C. § 103(c), the rejection is not applicable to claims 8 through 14.

The Office Action rejected claims 6, 7, 13 and 14 as anticipated by Baudry et al., Method and Apparatus for Electromagnetic Stimulation of the Skin for treating Pathological Conditions, U.S. Patent 6,461,375 (Oct. 8, 2002), citing column 5, lines 40 through 44 and column 6, lines 12 through 22. Regarding claims 6 and 13, the Office Action stated, "since by definition an electromagnetic field is the result of a charge in motion..., the examiner considers the device of Baudry... to utilize electrical energy in stimulating the median nerve and associated nerve structures in the wrist." Regarding claims 7 and 14, the Office Action stated that "the examiner considers the device of Baudry... to be an 'electro-acupuncture' device by virtue of the fact that it stimulates an acupuncture point via an electromagnetic field."

Regarding all of the rejections, the office Action has misapprehended both Baudry and the claimed methods. Applicants' claims are directed to methods that stimulate the patient's nerves or that stimulate the patient with an electro-acupuncture device. Baudry, on the other hand, uses a *passive* LRC circuit that interacts with the patient's biological electromagnetic field to create a resonance electromagnetic field. Specifically, Baudry states that "the resonance of the circuit as induced by the organism gives rise to a modification in the electromagnetic behavior of the organism, and causes said organism to be stimulated." Column 4, lines 7 through 9.

Given this fact, the Baudry device is non-enabled with respect to the claimed methods. Electro-magnetic fields expected by Baudry are simply too weak to stimulate nerves. Contrary to the office Action statement, the mere creation of an electro-magnetic field does not necessarily stimulate a patient with electrical energy. If it did, the well-known trick of diamagnetically levitating a frog in a very intense magnetic field (16 Tesla) would likely have gruesome results, yet the frog suffered no ill effect and experienced no discernable nervous stimulation while levitating gently in the field. Baudry, on the other hand, at best only

stimulates the creation of very weak resonant magnetic fields. Thus, any electrical current generated inside the patient by the Baudry field is far too weak to effect electro-acupuncture.

To anyone skilled in the art of electro-acupuncture Baudry's own disclosure indicates that Baudry is inoperable as an electro-acupuncture device. Baudry never states exactly what his device stimulates, other than the patient's skin. Baudry does state that "certain points or areas" can be stimulated, but only the skin is mentioned in particular. (This statement comports with the common knowledge among those skilled in the art that commercial electro-magnetic therapy devices generate fields too weak to penetrate much farther than the skin.) In the background section, Baudry notes that one can stimulate acupuncture points, but he never states that his device can accomplish electro-acupuncture. Baudry certainly never shows stimulation of nerves with his device, despite clear indication that he knew nerve stimulation could be achieved with electro-acupuncture. Thus, it appears that Baudry did not consider his device effective for electro-acupuncture.

Moreover, given the available scientific literature, no one skilled in medicine would believe that the Baudry device stimulates nerves. At best, given Figure 3 in Baudry, a magnetic field five times that of the human field is generated. The human field is very weak, so the increase in field strength is still insubstantial compared to the field necessary to stimulate a nerve. (High-tension electrical power lines generate enormous magnetic fields, but those fields have not been shown to have any noticeable effect on those people living near them.) Thus, regardless of the utility of the Baudry device, Baudry simply does not show the claimed methods.

With respect to claims 6 and 13, Baudry does not show the step of stimulating nerves. Thus, Baudry does not show all of the claimed limitations. Accordingly, Baudry does not anticipate claims 6 and 13.

With respect to claims 7 and 14, anyone skilled in the art of electro-acupuncture would know that Baudry's resonant electromagnetic field is not electro-acupuncture. Electro-acupuncture requires that an electrical current having a particular current range and a particular frequency be applied to specific acupuncture points. (The current itself must enter the body and directly stimulate the acupuncture point.) Contrary to the assertion of the office Action, Baudry does not - and physically cannot - apply an electrical current to an acupuncture point in the required power range (about 10 mA to 35 mA peak pulse). Thus, Baudry cannot be an electro-acupuncture device and Baudry does not show the step of applying an electro-acupuncture device to the wrist. Accordingly, Baudry does not anticipate claims 7 and 14.

The Office Action rejected claims 1 and 8 as obvious over Baudry under the assertion that Baudry does not explicitly refer to the ventral side of the wrist, but that the body contains a variety of points where stimulation may invoke positive treatment results, that the ventral side of the wrist is a well-known landmark for nerve stimulation (said landmark being designated the P6 point by prior artisans), and that it would be obvious to treat dizziness or vertigo by delivering a stimulation signal, as shown by Baudry, to the ventral side of the wrist.

The proposed modification to Baudry does not result in the claimed inventions. The rejection of claims 1 and 8 is based on the flawed assumption that Baudry is a nerve stimulation device. Baudry cannot be a nerve stimulation device since Baudry is physically incapable of stimulating nerves. Thus, Baudry does not show the step of mounting a non-invasive nerve stimulation device onto the ventral side of the wrist.

Furthermore, Baudry does not generate a stimulation signal. Baudry is a passive LRC circuit that responds to the body's magnetic field. Baudry's device does not actively generate a stimulation signal. Thus, Baudry does not show the step of

generating a stimulation signal. Since the proposed modification does not meet the claimed inventions, claims 1 and 8 are not obvious.

Conclusion

This response has addressed all of the Examiner's grounds for rejection. The rejections based on prior art have been traversed. Reconsideration of the rejections and allowance of the claims is requested.



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